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data are unavailable, the owner or operator shall provide substitute O_2 or CO_2 data for the heat input rate calculations in accordance with paragraphs (b) and (d) of this section.

(b) During the first 720 quality-assured monitor operating hours following initial certification at a particular unit or stack location (i.e., the date and time at which quality-assured data begins to be recorded by a CEMS at that location), or (when implementing these procedures for a previously certified CO₂ or O₂ monitor) during the 720 quality-assured monitor operating hours preceding implementation of the standard missing data procedures in paragraph (d) of this section, the owner or operator shall provide substitute CO2 or O2 data, as applicable, for the calculation of heat input (under section 5.2 of appendix F to this part) according to §75.31(b).

(c) [Reserved]

(d) Upon completion of 720 quality-assured monitor operating hours using the initial missing data procedures of §75.31(b), the owner or operator shall provide substitute data for CO2 or O2 concentration to calculate heat input rate, as follows. Substitute CO2 data for heat input rate determinations shall be provided according to §75.35(d). Substitute O2 data for the heat input rate determinations shall be provided in accordance with the procedures in §75.33(b), except that the term "O₂ concentration" shall apply rather than the term "SO2 concentration" and the term "O2 diluent monitor" shall apply rather than the term "SO2 pollutant concentration monitor." In addition, the term "substitute the lesser of" shall apply rather than "substitute the greater of;" the terms "minimum hourly O2 concentration" and "minimum potential O2 concentration, as determined under section 2.1.3.2 of appendix A to this part" shall apply rather than, respectively, the terms "maximum hourly SO2 concentration" and "maximum potential SO₂ concentration, as determined under section 2.1.1.1 of appendix A to this part;" and the terms "10th percentile" and "5th percentile" shall apply rather than, respectively,

the terms "90th percentile" and "95th percentile" (see Table 1 of §75.33).

[60 FR 26530, May 17, 1995, as amended at 64 FR 28604, May 26, 1999; 67 FR 40439, June 12, 2002]

§75.37 Missing data procedures for moisture.

- (a) The owner or operator of a unit with a continuous moisture monitoring system shall substitute for missing moisture data using the procedures of this section.
- (b) Where no prior quality-assured moisture data exist, substitute the minimum potential moisture percentage, from section 2.1.5 of appendix A to this part, except when Equation 19–3, 19–4 or 19–8 in Method 19 in appendix A to part 60 of this chapter is used to determine NO $_{\rm X}$ emission rate. If Equation 19–3, 19–4 or 19–8 in Method 19 in appendix A to part 60 of this chapter is used to determine NO $_{\rm X}$ emission rate, substitute the maximum potential moisture percentage, as specified in section 2.1.6 of appendix A to this part.
- (c) During the first 720 quality-assured monitor operating hours following initial certification at a particular unit or stack location (i.e., the date and time at which quality-assured data begins to be recorded by a moisture monitoring system at that location), the owner or operator shall provide substitute data for moisture according to §75.31(b).
- (d) Upon completion of the first 720 quality-assured monitor operating hours following initial certification, the owner or operator shall provide substitute data for moisture as follows:
- (1) Unless Equation 19-3, 19-4 or 19-8 in Method 19 in appendix A to part 60 of this chapter is used to determine NO_X emission rate, follow the missing data procedures in §75.33(b), except that the term "moisture percentage" shall apply rather than "SO₂ concentration;" the term "moisture monitoring the term "moisture monitoring system" shall apply rather than the term "SO₂ pollutant concentration monitor;" the term "substitute the lesser of" shall apply rather than "substitute the greater of;" the terms "minimum hourly moisture percentage" and "minimum potential moisture percentage, as determined under section 2.1.5 of appendix A to this part"

shall apply rather than, respectively, the terms "maximum hourly SO_2 concentration" and "maximum potential SO_2 concentration, as determined under section 2.1.1.1 of appendix A to this part;" and the terms "10th percentile" and "5th percentile" shall apply rather than, respectively, the terms "90th percentile" and "95th percentile" (see Table 1 of §75.33).

- (2) When Equation 19–3, 19–4 or 19–8 in Method 19 in appendix A to part 60 of this chapter is used to determine NO_X emission rate:
- (i) Provided that none of the following equations is used to determine SO₂ emissions, CO₂ emissions or heat input: Equation F-2, F-14b, F-16, F-17, or F-18 in appendix F to this part, or Equation 19-5 or 19-9 in Method 19 in appendix A to part 60 of this chapter, use the missing data procedures in §75.33(b), except that the term "moisture percentage" shall apply rather than "SO2 concentration," the term "moisture monitoring system" shall apply rather than " SO_2 pollutant concentration monitor," and the term "maximum potential moisture percentage, as defined in section 2.1.6 of appendix A to this part" shall apply, rather than "maximum potential SO2 concentration;" or
- (ii) If any of the following equations is used to determine SO_2 emissions, CO_2 emissions or heat input: Equation F-2, F-14b, F-16, F-17, or F-18 in appendix F to this part, or Equation 19-5 or 19-9 in Method 19 in appendix A to part 60 of this chapter, the owner or operator shall petition the Administrator under §75.66(1) for permission to use an alternative moisture missing data procedure.

[64 FR 28604, May 26, 1999, as amended at 67 FR 40439, June 12, 2002]

§§ 75.38-75.39 [Reserved]

Subpart E—Alternative Monitoring Systems

§ 75.40 General demonstration requirements.

(a) The owner or operator of an affected unit, or the owner or operator of an affected unit and representing a class of affected units which meet the criteria specified in §75.47, required to

install a continuous emission monitoring system may apply to the Administrator for approval of an alternative monitoring system (or system component) to determine average hourly emission data for SO₂, NO_X, and/or volumetric flow by demonstrating that the alternative monitoring system has the same or better precision, reliability, accessibility, and timeliness as that provided by the continuous emission monitoring system.

(b) The requirements of this subpart shall be met by the alternative monitoring system when compared to a contemporaneously operating, fully certified continuous emission monitoring system or a contemporaneously operating reference method, where the appropriate reference methods are listed in §75.22.

§ 75.41 Precision criteria.

- (a) Data collection and analysis. To demonstrate precision equal to or better than the continuous emission monitoring system, the owner or operator shall conduct an F-test, a correlation analysis, and a t-test for bias as described in this section. The t-test shall be performed only on sample data at the normal operating level and primary fuel supply, whereas the F-test and the correlation analysis must be performed on each of the data sets required under paragraphs (a)(4) and (a)(5) of this section. The owner or operator shall collect and analyze data according to the following requirements:
- (1) Data from the alternative monitoring system and the continuous emission monitoring system shall be collected and paired in a manner that ensures each pair of values applies to hourly average emissions during the same hour.
- (2) An alternative monitoring system that directly measures emissions shall have probes or other measuring devices in locations that are in proximity to the continuous emission monitoring system and shall provide data on the same parameters as those measured by the continuous emission monitoring system. Data from the alternative monitoring system shall meet the statistical tests for precision in paragraph (c) of this section and the t-test for bias in appendix A of this part.